Check List the journal of biodiversity data

NOTES ON GEOGRAPHIC DISTRIBUTION

Check List 11(4): 1710, 7 August 2015 doi: http://dx.doi.org/10.15560/11.4.1710
ISSN 1809-127X © 2015 Check List and Authors

New record of *Liolaemus ditadai* Cei, 1983 (Squamata, Liolaemidae) from Santiago del Estero province, Argentina

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Abstract: *Liolaemus ditadai* is a rare liolaemid lizard originally described from Salinas Grandes salt-pans flat, in the border between Cordoba and Catamarca Province in central Argentina. Only a few specimens of this species are known. Here, we present a new record that result in a significant extension of the known distribution of the species, which is currently considered to be restricted to a small area in Salinas Grandes. In addition, we comment on previous records of the species in central Argentina.

Key words: *Liolaemus ditadai*, Liolaemini, Santiago del Estero, Argentina

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The lizard *Liolemus ditadai* belongs to the *L. anomalus* species group, which is composed by seven species (*L. acostai*, *L. anomalus*, *L. ditadai*, *L. lentus*, *L. millcayac*, *L. pipanaco* and *L. pseudoanomalus*) that occur only in Argentina (Abdala and Juarez Heredia 2013). *Liolaemus ditadai* is a rare and poorly known species (Figure 1A) characterized by its stout body shape, robust head, short tail and legs, dark cryptic coloration, eyelid scales developed and low number of precloacal pores (Cei 1983; Abdala and Juarez Heredia 2013). The type locality of *L. ditadai* is "Salinas Grandes", located 4 km from the border between Cordoba and Catamarca (Cei 1983). Later, Abdala (2007b) reported this species 270 km east of the type locality, in the southeast corner of Santiago del Estero province, based on a female specimen deposited at Museo Argentino de Ciencias Naturales. The voucher specimen is badly preserved, which makes identification difficult, and further fieldwork is necessary to confirm the presence of this species in that area (Abdala et al. 2012; Abdala and Juarez Heredia 2013). References about *Liolaemus ditadai* in the literature are few (Cei 1983, 1993; Abdala 2007a, 2007b; Abdala and Juarez Heredia 2013), because it is a difficult species to find (cryptic coloration and inconspicuous behavior) and apparently occurs only in some very specific habitat types, as salty margins of salt-pan lakes (Cei 1983; Abdala and Juarez Heredia 2013). Only

Figure 1. A: *Liolaemus ditadai*, adult male (LJAMM-CNP 16568) from Salinas de Ambargasta, Santiago del Estero, Argentina. **B**: A general view of the locality were *Liolaemus ditadai* was found.

Table 1. Standard measurements and scale counts of two specimens adult males of *Liolaemus ditadai* Cei 1983. Measurements are in mm and scale in numbers.

	LJAMM-CNP 16568	LJAMM-CNP 16569
Snout-Vent Length	70.08	71.68
Axilla–groin distance	31.97	34.96
Head length	15.97	17.42
Head width	14.31	14.11
Head high	9.79	9.9
Foot length	15.51	14.86
Tibial length	12.71	13.14
Arm length	18.07	17.31
Scales Around Midbody	68	63
Dorsal Scales	84	86
Ventral scales	79	77
Fourth toe lamellae	23	22
Supralabial Scales	9	8
Infralabial scales	7	6
Cloacal pores	4	4

a few specimens are known: the type series (Cei 1983) of 12 specimens is deposited in the Museo de La Plata, Argentina (MLP), Museu de Zoologia da Universidade de São Paulo, Brazil (MZUSP) and Jose M. Cei Diagnostic Collection (JMC-DC now deposited at Universidad Nacional de San Luis, Argentina). And other specimens are distributed in other collections: Museo Argentino de Ciencias Naturales (possibly four specimens; Abdala 2007b), Fundación Miguel Lillo (two specimens; Abdala and Juárez Heredia 2013) and Centro Nacional Patagónico (six specimens; Appendix 1).

On 19 November 2014, during a fieldwork at Salinas de Ambargasta, Department Ojo de Agua, Santiago del Estero Province, central Argentina (28°53′35″ S, 063°58′39.9″ W), two individuals of *L. ditadai* were found active between 16:40–17:00 h, along the borders of a muddy road connecting National Road

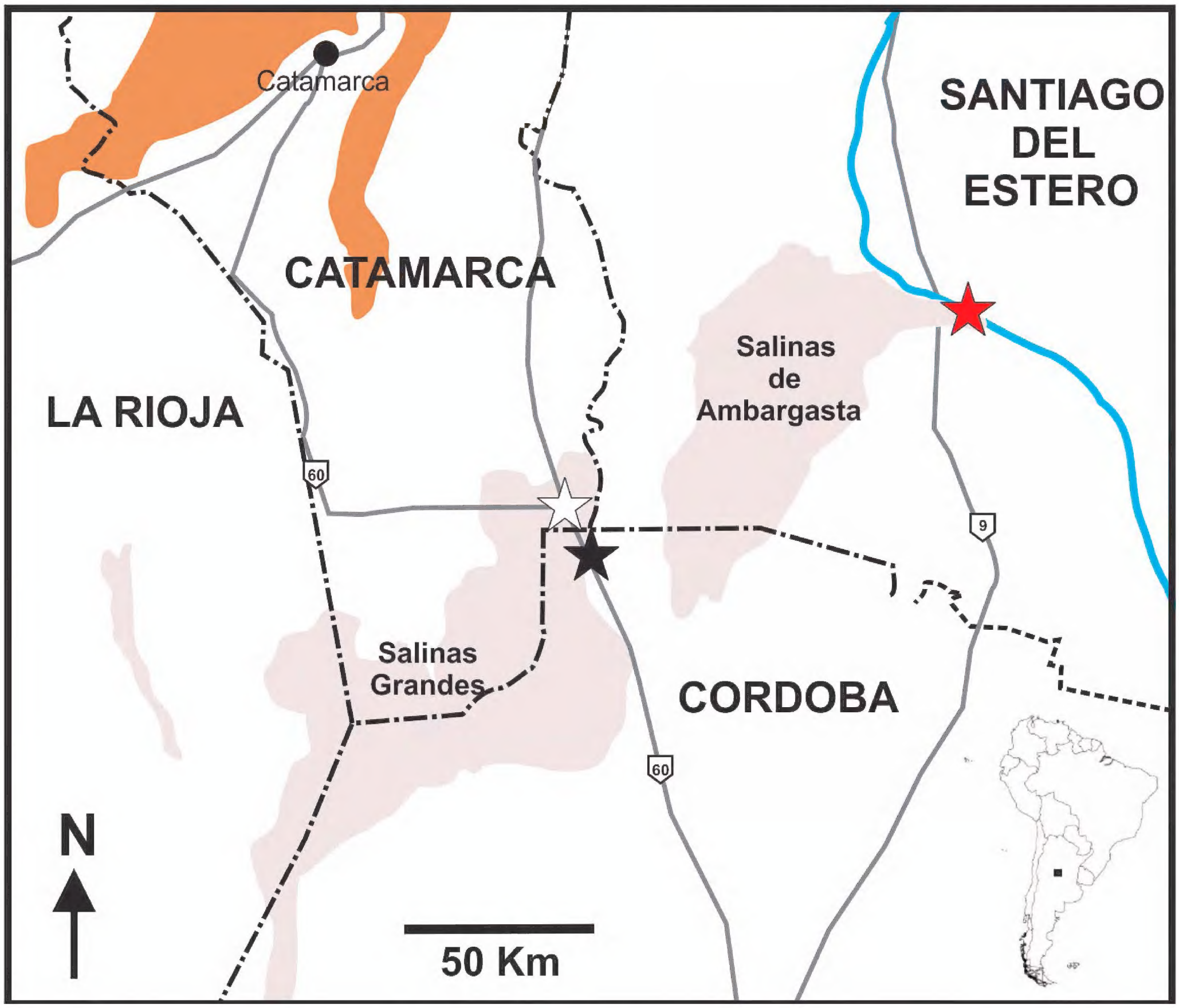

Figure 2. Known localities for *Liolaemus ditadai*: Red star: new record for *Liolaemus ditadai*. Black star: type locality (Cei 1983) and localities cited by Abdala and Juarez Heredia (2013). White star: collection locality for specimens in LJAMM-CNP (LJAMM-CNP 16568-9) and MACN collections (Genise pers. comm.) in Santiago del Estero Province. Locality cited by Abdala (2007) and Abdala and Juarez-Heredia (2013) is not show. Grey lines: main national roads, blue line: Saladillo River, brown: main mountain ranges and black dot mark Catamarca city for reference. Insert: area in South America.

9 at Rio Saladillo village and Salinas village, on the southern side of Saladillo River, 1 km east of National Road 9 (Figure 1B). Road borders were covered with vegetation typical of saltpan flats of the region, such as *Heterostachys ritteriana* and *Allenrolfea patagonica*. The basic information for this species is scarce, thus we took some basic morphometric data (usually recorded in *Liolaemus* genus), presented on Table 1. We identified the specimens based on the descriptions provided by Cei (1993) and Abdala and Juárez Heredia (2013). In addition, the identification was confirmed by Juan Carlos Acosta (Departamento de Biología, Facultad de Ciencias Exactas, Físicas y Naturales, Universidad Nacional de San Juan, Argentina).

Collected specimens were deposited in the herpetological collection LJAMM-CNP of the Centro Nacional Patagónico (CENPAT-CONICET), Puerto Madryn, Chubut, Argentina (Appendix 1).

The present note provides the first record for *Liolaemus ditadai* in Salinas de Ambargasta (Figure 2), extending its known distribution ca. 120 km north of the type-locality in Cordoba Province (Cei 1983), and 230 km northwest from the unique locality known for Santiago del Estero Province (Abdala 2007, but see remarks in Abdala et al. 2012 and Abdala and Juarez Heredia 2013).

Liolaemus ditadai is considered a rare species and its conservation status was reported as Threatened, since very little information on its ecological requirements or biological characteristics are known, and the specimens are justa few and from a very small area (Abdala et al. 2012; Abdala and Juarez Heredia 2013). The present record provides an important contribution to the knowledge of the geographic distribution of *Liolaemus ditadai*.

ACKNOWLEDGEMENTS

We thank M. Morando and J.W. Sites Jr. for fund support for field trips. Additional support was obtained from an FONCYT-PICT 0784-2011 grant (issued to L.J. Avila).

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Authors' contribution statement: LJA, CHFP and PC collected the specimens, processed and identified the material, and wrote the text.

Received: 9 April 2015
Accepted: 12 June 2015
Academic editor: Pedro H. Bernardo

Appendix 1. Specimens examined and the locality where they were collected.

Liolaemus ditadai. Argentina: Catamarca province: La Paz depatment: Ruta Nacional 157, 2 km NW empalme Ruta Nacional 60, Salinas Grandes (29°29′48.5″ S, 64°55′53.1″ W, 201 m above sea level): LJAMM-CNP 15622-15625. Santiago del Estero province: Ojo de Agua department: Salinas de Ambargasta, 0.5 km S Río Saladillo Ruta Nacional 9 (28°53′35″ S, 063°58′39.9″ W, 131 m above sea level): LJAMM-CNP 16568-16569.